New Jersey Department of Transportation

1035 Parkway Avenue, PO Box 600, Trenton, New Jersey 08625-0600



Baseline Document Change Announcement

ANNOUNCEMENT: BDC14S-05

DATE: October 28, 2015

SUBJECT: Steel Bar Bridge Railing

- Revision to Subparts/Subsections/division 507, 507.02.01, 507.03.06, 507.04, 509, 509.01, 509.03.01, 509.04, 906.04.01, 906.07 and 913.03.01 of the 2007 Standard Specifications for Road and Bridge Construction.

REFERENCE: Steel Bar Bridge Railing Details

- Revised BCD-507-10 and BCD-507-11 of the 2007 Standard Bridge

Construction Detail Booklet.

- BDC15D-04 dated October 28, 2015

Sections 507, 509, 906 and 913 of the 2007 Standard Specifications have been revised to introduce several changes as follow:

- The 4-Bar Open Steel Parapet Specifications has been replaced by the Steel Bar Bridge Railing Corresponding Material Specifications and the Item has also been revised.
- The Bridge railing has been replaced by the Bridge combination railing and miscellaneous railing.
 Corresponding Material and Welding Specifications and the Item have also been revised.
- An AISC web site has been cited for the compliance in the fabrication of structural steel as well as steel bridge railing subject to vehicular impact.

This BDC announcement must be read in conjunction with the referenced BDC Announcement.

The following revisions have been incorporated into the Standard Input SI2007 as of October 28, 2015.

SECTION 507 – CONCRETE BRIDGE DECK AND APPROACHES THIS SECTION IS RENAMED TO:

SECTION 507 - CONCRETE BRIDGE DECK, BRIDGE PARAPET AND APPROACHES

507.03.06 4-Bar Open Steel Parapet

SUBPART IS RENAMED AND CHANGED TO:

507.03.06 Steel Bar Bridge Railing

Ensure that the deck has cured for at least 14 days before placing concrete for steel bar bridge railing. Place concrete as specified in 504.03.02.D. Install as shown on the Plans. Construct anchor bolt system as specified in 509.03.01-1.

507.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS DELETED:

4-BAR OPEN STEEL PARAPET LINEAR FOOT

THE FOLLOWING ITEM IS ADDED:

STEEL ___BAR BRIDGE RAILING LINEAR FOOT

SECTION 509 – BRIDGE RAILING AND FENCE

THIS SECTION IS RENAMED TO:

SECTION 509 – BRIDGE COMBINATION RAILING, MISCELLANEOUS RAILINGS AND FENCE

509.01 DESCRIPTION

THE ENTIRE SUBSECTION IS CHANGED TO:

This Section describes the requirements for constructing metal railing, fence, and guide rail on bridges. Metal railing includes metal railing components for combination traffic railing system, combination non-traffic railing system, non-traffic pedestrian or bicycle railing, ornamental railing and other railing not subject to vehicular impact.

509.03.01 Bridge Railing

THE THIRD PARAGRAPH IS CHANGED TO WITHOUT PARTS 1 & 2:

Ensure that the railing is fabricated to allow for minor adjustments in both horizontal and vertical directions. Install 1 or 2-rail aluminum or steel railing on top of the concrete parapet as shown on the Plans. Install other types of metal railing on concrete sidewalk or deck as shown on the Plans. Do not use expansion type anchor bolts.

509.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS AS IT APPEARS IN THE SI ARE DELETED:

Item	Pay Unit
BRIDGE RAILING (RAIL, ALUMINUM)	LINEAR FOOT
BRIDGE RAILING (RAIL, STEEL)	LINEAR FOOT

THE FOLLOWING ITEMS ARE ADDED:

Item	Pay Unit
BRIDGE COMBINATION RAILING (RAIL, ALUMINUM)	LINEAR FOOT
BRIDGE COMBINATION RAILING (RAIL, STEEL)	LINEAR FOOT

906.04.01 AISC Certification

THE ENTIRE SUBPART IS CHANGED TO:

Ensure that the structural steel fabricating plant is certified under the AISC Quality Certification Program in the applicable categories by the type of work performed. See the following web page: http://www.aisc.org/content.aspx?id=5388

906.07 4-BAR OPEN STEEL PARAPET

SUBSECTION IS RENAMED AND CHANGED TO:

906.07 STEEL BAR BRIDGE RAILING

For steel bar bridge railing, including NJDOT standard steel 4-bar bridge railing, provide anchor bolts, washers, and exposed bolts as specified in 908.01.03, and all other bolts and nuts as specified in 908.01.01 and 908.01.02. Provide rail bars according to ASTM A 500 Grade B, rail post according to ASTM A 709, Grade 50, and all other shapes and plates according to ASTM A 709, Grade 36.

Fabricate steel bar bridge railing according to 906.04 and paint according to 906.06 or galvanize according to 912.02.01. Prohibit welded splices for steel rail tubes.

913.03.01 Steel Railing

THE ENTIRE SUBPART IS CHANGED TO:

Fabricate steel bar bridge railing and steel railing components of combination railing system from structural steel as specified in 906.01 and 906.04. For non-traffic steel railing, construct welds according to the requirements of AWS D1.1 Structural Welding Code. Use bolts and bolting materials as specified in 908.01. When specified, paint as specified in 906.06 or galvanize as specified in 912.02.01. Submit certifications of compliance, as specified in 106.07 and copies of mill certifications.

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:	Approved By:
Richard Jaffe, P.E.	 Richard T. Hammer
Director	Assistant Commissioner
Capital Program Support	Capital Program Management

RJ: KS: HP ☐ BDC14S-05.doc